

APPENDIX B

STATEMENT OF WORK FOR THE REMEDIAL DESIGN AND REMEDIAL ACTION AT THE ALLIED CHEMICAL AND IRONTON COKE SUPERFUND SITE OPERABLE UNIT 3 TAR PLANT, IRONTON LAWRENCE COUNTY, OHIO

I. PURPOSE

The purpose of this Statement of Work (SOW) is to set forth requirements for implementation of the remedial action set forth in the Record of Decision (ROD), which was signed by the Regional Administrator of EPA Region V on September 20, 2007, for Operable Unit 3 (OU3), the tar plant, at the Allied Chemical & Ironton Coke Site (Site). The Settling Defendant shall comply with the requirements of the ROD, the SOW, the Consent Decree, the approved Remedial Design Work Plan, the approved Remedial Action Work Plan, and Appendix C "Design Review Checklist" of the EPA Superfund Remedial Design and Remedial Action Guidance; and any additional guidance provided by EPA in submitting deliverables for designing and implementing the remedial action at OU3, as applicable.

II. DESCRIPTION OF THE REMEDIAL ACTION/ PERFORMANCE STANDARDS

Settling Defendant shall design and implement the Remedial Action to meet the performance standards and specifications set forth in the ROD and this SOW. Performance standards shall include cleanup standards, standards of control, quality criteria and other substantive requirements, criteria or limitations including all Applicable or Relevant and Appropriate Requirements (ARARs) set forth in the ROD, SOW and/or Consent Decree.

A. Site Security

The Settling Defendant shall maintain the existing fence at the main parcel identified at Figure 8 in the ROD (Main Parcel) to prevent access and vandalism to the Site. Warning signs shall be posted at appropriate intervals along the fence, the River Parcel, river bank and all gates. The warning signs shall advise that the area is hazardous due to chemicals in the soils and sediment. The signs shall also provide a telephone number to call for further information. These measures shall remain in place until EPA approves the Remedial Action Report.

B. Restrictive Covenants/Deed Restrictions

Within 30 days after EPA has notified Settling Defendant that it has accepted the draft restrictive covenants described in Section IX (Access and Institutional Controls), Paragraph 24 of the Consent Decree, Settling Defendant shall execute and record with the Lawrence

County, Ohio, Recorder the restrictive covenants described in Section IX (Access and Institutional Controls), Paragraph 24 of the Consent Decree.

C. Construction, Installation, and Operation of a Low-Permeability Cover System for Remedial Action

1. Soil Remedy: Low-Permeability Cover

a) Installation of Low-Permeability Cover on the Main Parcel

Settling Defendant shall design and construct a low-permeability cover for the 16.1 acre Main Parcel, identified in Figure 8 in the ROD, which shall include, but not be limited to, the following:

Settling Defendant shall grade the current surface, and then shall install a low-permeability cover to prevent infiltration of precipitation, consistent with the Ohio EPA municipal solid waste landfills requirements, specifically the sanitary landfill cap design requirements set forth in Ohio Administrative Code, Chapter 3745-27-08, and shall meet the infiltration goals of the Ohio EPA municipal solid waste landfill regulations. Further, Settling Defendant shall consult with Ohio EPA and EPA and attempt, to the extent practical, to design and construct the cover in a manner that does not preclude reasonable and appropriate redevelopment to the extent EPA permits the redevelopment of OU3. Further, the cover shall be designed and constructed so as to provide a structurally sound and permanent cover over the contaminated soils while controlling ponding, storm water run-off and erosion.

1. Materials showing visual evidence of free flowing tar during construction shall be segregated and disposed off-site in a RCRA-licensed facility. Settling Defendant shall conduct a waste determination for disposal and transportation in accord with 40 C.F.R. Parts 261 and 264. Such liquids will be disposed off site at a RCRA-licensed facility.
2. The grading described in subparagraph 1 above may include the removal of soil along the property perimeter, as appropriate, to allow proper grading to the adjacent properties and fill beneath the cover to acquire an appropriate slope.
3. The existing above-ground piping may be replaced with underground piping and the above ground structures (e.g. metal shed, retaining walls, and sumps) and debris piles shall be removed.
4. The existing engineering building may be demolished. Modification of the existing monitoring wells may also be necessary to allow for future monitoring/recovery of groundwater and/or dense non-aqueous phase liquid (DNAPL).

b) Installation of Soil Cover on the River Parcel

Settling Defendant shall design and construct a soil cover on the 4 acre River Parcel, which shall include clearing and grubbing 4 acres of the River Parcel; grading to achieve the necessary slope along the river bank to prevent accumulation and allow runoff of surface water; installing a geotextile fabric and soil cover consisting of 6-inches of top soil and a minimum of 18-inches of clean fill to prevent direct contact with or ingestion of affected soils by humans and to protect potential ecological receptors; and restoration of the river bank. Native plants shall be planted to anchor the embankment while improving riverbank aesthetics.

The river bank adjacent to the River Parcel shall be restored and stabilized by installing a geotextile fabric and then installing dump rock or riprap as necessary onto the bank. The size, the depth, and the elevation on the bank shall be dictated by the river hydrology, but is presumed to require Class A size rock, to be installed up to the top of the bank. As part of installing the rock toe, it may be necessary to remove sediment along the bank. If such sediment is removed, it shall be sampled for contaminants and shall be disposed at a permitted offsite facility in accord with RCRA's requirements. If appropriate, at the normal pool elevation, the dump rock shall be mixed with soil and live cottonwood posts shall be inserted between the rocks. Above the dump rock toe, the bank shall be shaped to the necessary slope, seeded with native grasses and a temporary seed matrix, mulched, and covered with a woven coir blanket sufficient to provide stability of the slope during the vegetative period. The entire bank of the river shall be planted with native shrubs and trees. A vegetative swale shall be installed at the top of the bank to prevent surface flow from running onto the bank. At appropriate locations, flow shall be concentrated and run down the bank on a dumprock swale.

D. Air Remedy: Institutional Controls

Settling Defendant shall implement restrictions through environmental covenants in accord with Section IX (Access and Institutional Controls) of the Consent Decree and Appendix D thereto. Settling Defendant shall also establish a Health and Safety Plan in accord with Section IV.B of this SOW, to protect indoor and outdoor workers during construction of the remedy. Restrictive covenants that run with the land and that bind all future owners and users of the property shall be executed and recorded in the real property record. Such covenants shall prohibit residential use of the property, prohibit the use of onsite groundwater, prohibit compromising or otherwise degrading the cover systems, and require that EPA-approved monitoring or institutional controls be in place prior to the undertaking of any construction work on the property or the occupancy of any structures to be built on the property. Additional restrictions shall require that future buildings include measures (e.g., physical barriers, venting, monitoring) to protect indoor workers and that health and safety procedures be established to protect outdoor workers during any excavation or Site grading activities. Restrictive covenants shall be properly recorded in the property records.

E. Sediment Remedy: Combination of Dredging and In-Situ Capping

1. Pre-Design Studies

Settling Defendant shall collect additional data to determine the vertical and horizontal profiles of the sediment contamination and the most current information on river hydraulics in order to delineate the areas to be dredged and/or capped. The additional data may include, but not be limited to: additional biological/toxicological testing to refine the area of contamination; river flow velocities; grain size distribution; sediment shear strength; and hydrographic and side-scan sonar surveying.

2. Dredging

Settling Defendant shall design and implement a dredging program and/or a capping program as set forth below for the contaminated sediments identified after the Pre-Design Studies have been completed which shall include, as applicable, sediment removal using dredging techniques appropriate to the site conditions based upon data gathered pursuant to E.1. above. Turbidity levels in the river shall be measured during dredging to confirm that acceptable turbidity levels are maintained.

3. Dewatering, Transfer, and Disposal

Settling Defendant shall dewater the excavated sediments. This may include evaluating the potential use of geotubes. Appropriate dewatering methods will be determined during the preliminary design. Water generated during the dewatering process shall be collected and may be treated by the existing water treatment system located on the Coal Plant and Lagoon Area (CPLA) operable unit. Due to the potential limited capacity of the treatment system, water may need to be stored in above-ground tanks or frac tanks until treatment.

Settling Defendant shall transport dewatered sediments off-site to a landfill in accordance with RCRA characterization requirements. Waste characterization, profiling, and landfill approval shall be completed during the pre-design and design phases of the sediment investigation.

If the dewatered sediments need to be stabilized, Settling Defendant shall use appropriate methods so that it passes the paint-filter test.

4. Post Dredging Sampling

Following the completion of dredging, Settling Defendant shall perform verification sample collection to determine whether residuals are present. If the results of verification samples indicate that Preliminary Remediation Goals (i.e., background Equilibrium Sediment Benchmark Toxic Units) are still exceeded, a residual management plan shall be designed and be implemented.

5. Installation of In-Situ Cap

If the approved design requires a cap, than Settling Defendant shall design and construct an in-situ cap (in combination with or in lieu of a dredging program), which isolates the contaminated sediment from the benthic and aquatic ecosystems. The contaminated sediment exceeding the clean up goals set forth in the ROD shall be covered with either earthen materials (such as, sand, or gravel, and/or cobbles), engineered materials (such as, geosynthetics or marine mattresses), or a combination of these materials. Design and material selection depends on the nature of the contamination, the physical and hydraulic characteristics of the waterway (including scour), long-term plans for the area (i.e., development and maintenance activities), and permitting requirements.

6. Institutional Controls and Inspections

Institutional controls shall be implemented to prevent activities that could damage the cap in accord with Section IX (Access and Institutional Controls) of the Consent Decree and Appendix D thereto.

III. SCOPE OF REMEDIAL DESIGN AND REMEDIAL ACTION

The Remedial Design/Remedial Action shall consist of the following six tasks. All plans are subject to EPA approval.

Task 1: RD Work Plan

Task 2: Remedial Design Phases

- A. Preliminary Design (30%)
- B. Prefinal Design (95%)
- C. Final Design

Task 3: Remedial Action Work Plan

Task 4: Remedial Action/Construction

- A. Preconstruction Meeting
 - B. Prefinal Inspection
 - C. Final Inspection
 - D. Reports
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- 1. Final Construction Report
 - 2. Completion of Remedial Action Report
 - 3. Completion of Work Report

Task 5: Operation and Maintenance

Task 6: Performance Monitoring

Task 1: Remedial Design Work Plan

The Settling Defendant shall submit a Work Plan which shall document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of Remedial Actions for EPA review and approval. The plan shall document the responsibility and authority of all organizations and key personnel involved with the implementation and shall include a description of qualifications of key personnel directing the Remedial Design, including contractor personnel. The Work Plan shall also contain a schedule of Remedial Design activities. The Settling Defendant shall submit a Remedial Design Work Plan in accordance with Section XI (EPA Approval of Plans and Other Submissions) and Paragraph 11 of the Consent Decree and Section V of this SOW.

A. Pre-Design Work Plan

This remedial design work plan (RD Work Plan) shall require pre-design studies to provide information necessary to fully implement the remedial design and remedial action. This RD Work Plan shall include, at a minimum, a pre-design QAPP, Health and Safety Plan, Field Sampling Plan and schedule to further delineate the extent of contamination in the river sediment. Where possible, Settling Defendant shall use the approved plans already issued for the project. The extent of sediment dredging and/or capping required shall be based on additional data collection and evaluation during the pre-design studies. Additional data shall be collected as part of this remedy to ensure utilization of appropriate-dredging and/or capping technologies for the specific river conditions and to ensure that turbidity is minimized. The additional data shall include, but not be limited to: river flow velocities; grain size distribution; sediment shear strength; hydrographic and side-scan sonar surveying; and the United States Army Corps of Engineers' Hydraulic Engineer Center – River Analysis System (HEC-RAS) modeling, or equivalent alternative, as approved by EPA.

The Settling Defendant shall implement the pre-design work in accordance with the final RD Work Plan. The results of the pre-design studies shall be included with the 30% design.

Task 2: Remedial Design Phases

Settling Defendant shall prepare construction plans and specifications to implement the Remedial Actions at the Site as described in the ROD and this SOW. Plans and specifications shall be submitted consistent with the schedule set forth in Section V below. Subject to approval by EPA, Settling Defendant may submit more than one set of design submittals reflecting different components of the Remedial Action. All plans and specifications shall be developed consistent with EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A), and shall demonstrate that the Remedial Action shall meet all objectives of the ROD, the CD and this SOW, including all Performance Standards. Settling Defendant shall meet regularly with EPA to discuss design issues.

A. Preliminary Design

Settling Defendant shall submit the Preliminary Design when the design effort is approximately 30% complete. The Preliminary Design submittal shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including preliminary design calculations;
- Results of any treatability studies and additional field sampling;
- Design assumptions and parameters, including design restrictions, process performance criteria, appropriate unit processes for any treatment train, and expected removal or treatment efficiencies for both the process and waste (concentration and volume), as applicable;
- Proposed cleanup verification methods, including compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
- Outline of required specifications;
- Proposed siting/locations of processes/construction activity;
- Expected long-term monitoring and operation requirements;
- Real estate, easement, and permit requirements; and
- Preliminary construction schedule, including contracting strategy.

B. Prefinal Design

Settling Defendant shall submit the Prefinal Design when the design effort is approximately 95% complete. The Prefinal Design shall fully address all comments made to the preceding design submittal. The Prefinal Design submittal shall include those elements listed for the Preliminary Design, as well as, the following:

- Draft Performance Standard Verification Plan;
- Draft Construction Quality Assurance Plan; and
- Draft QAPP/Draft Health and Safety Plan/Draft Field Sampling Plan/Draft Contingency Plan.

The Prefinal Design shall serve as the Final Design if EPA has no further comments and issues the notice to proceed.

C. Final Design

Settling Defendant shall submit the Final Design when the design effort is 100% complete. The Final Design shall fully address all comments made to the Prefinal Design and shall include reproducible drawings and specifications suitable for bid advertisement.

The Final Design submittals shall include those elements listed for the Preliminary Design, as well as the following:

- Final Performance Standard Verification Plan;
- Final Construction Quality Assurance Plan;
- Final QAPP/Final H & S Plan/Final FSP/Final Contingency Plan;
- Draft Operation and Maintenance Plan;
- Capital and Operation and Maintenance Cost Estimate. This cost estimate shall refine the FS cost estimate to reflect the detail presented in the Final Design; and
- Final Project Schedule for the construction and implementation of the Remedial Action which identifies timing for initiation and completion of all critical path tasks. The final project schedule submitted as part of the Final Design shall include specific dates for completion of the project and major milestones.

Task 3: Remedial Action Work Plan

The Settling Defendant shall submit a Remedial Action Work Plan which includes a detailed description of the remediation and construction activities. The RA Work Plan shall include a project schedule for each major activity and submission of deliverables generated during the Remedial Action. The Settling Defendant shall submit a Final Remedial Action Work Plan in accordance with Section VI (Performance of Work by Settling Defendant) and Paragraph 12 of the Consent Decree and Section V of this SOW.

Task 4: Remedial Action Construction

The Settling Defendant shall implement the Remedial Action as detailed in the approved Final Design. The following activities shall be completed in constructing the Remedial Action:

A. Preconstruction inspection and meeting

The Settling Defendant and its Project Coordinator shall participate with the EPA in a preconstruction inspection and meeting to:

- a. Review methods for documenting and reporting inspection data;
- b. Review methods for distributing and storing documents and reports;
- c. Review work area security and safety protocol;
- d. Discuss any appropriate modifications of the construction quality assurance plan to ensure that Site-specific considerations are addressed; and
- e. Conduct a Site walk-around to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations.

The preconstruction inspection and meeting shall be documented by a designated person and minutes shall be transmitted to all parties.

B. Prefinal inspection

Within fifteen (15) days after Settling Defendant makes a preliminary determination that construction is complete, the Settling Defendant shall notify the EPA and the State for the purpose of scheduling a prefinal inspection pursuant to Paragraph 49 of the Consent Decree. The prefinal inspection shall consist of a walk-through inspection of the entire Facility with EPA. The prefinal inspection is to determine whether the project is complete and consistent with the contract documents and the Remedial Action. Any outstanding construction items discovered during the prefinal inspection shall be identified and noted. Additionally, treatment equipment shall be operationally tested by the Settling Defendant. The Settling Defendant shall certify that the equipment has performed to meet the purpose and intent of the specifications. Retesting shall be completed where deficiencies are revealed. The prefinal inspection report shall outline the outstanding construction items, actions required to resolve items, completion date for these items, and a proposed date for final inspection.

C. Final inspection

Within fifteen (15) days after completion of any work identified in the prefinal inspection report, the Settling Defendant shall notify the EPA and the State for the purposes of scheduling a final inspection pursuant to Paragraph 50 of the Consent Decree. The final inspection shall consist of a walk-through inspection of the Facility by EPA and the Settling Defendant. The prefinal inspection report shall be used as a checklist with the final inspection focusing on the outstanding construction items identified in the prefinal inspection. Confirmation shall be made that outstanding items have been resolved.

D. Reports

1. Completion of Remedial Action Report

Within sixty (60) days of a successful final inspection pursuant to Paragraph 49, Section XIV (Certification of Completion) of the Consent Decree, Settling Defendant shall submit a Completion of Remedial Action Report. In the report, a registered professional engineer and the Settling Defendant's Project Coordinator shall state the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of Settling Defendant or the Settling Defendant's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. Completion of Work Report

Within sixty (60) days of a successful final inspection pursuant to Paragraph 50 of the Consent Decree, Settling Defendant shall submit a Completion of Work Report. In the report, a registered professional engineer and the Settling Defendant's Project Coordinator shall state the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer not previously submitted. The report shall contain the following statement, signed by a responsible corporate official of Settling Defendant or the Settling Defendant's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Task 5: Operation and Maintenance

The Settling Defendant shall prepare an Operation and Maintenance (O&M) Plan to cover both implementation and long term maintenance of the Remedial Action. An initial Draft O&M Plan shall be submitted as a final Design Document submission. The final O&M Plan shall be submitted to EPA prior to the pre-final construction inspection, in accordance with the approved construction schedule. The plan shall be composed of the following elements, as applicable:

1. Description of routine operation and maintenance:
 - a. Description of tasks for operation;
 - b. Description of tasks for maintenance;
 - c. Description of prescribed treatment or operation conditions; and

- d. Schedule showing frequency of each O&M-related task.
2. Description of potential operating problems:
 - a. Description and analysis of potential operation problems;
 - b. Sources of information regarding problems; and
 - c. Common and/or proposed or anticipated remedies.
3. Description of routine monitoring and laboratory testing:
 - a. Description of monitoring tasks;
 - b. Description of required data collection, laboratory tests and their interpretation;
 - c. Required quality assurance, and quality control;
 - d. Schedule of monitoring frequency and procedures for a petition to EPA to reduce the frequency of or discontinue monitoring; and
 - e. Description of verification sampling procedures if Cleanup or Performance Standards set forth in the ROD are exceeded in routine monitoring.
4. Description of O&M activities:
 - a. Should systems fail, alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health or the environment or exceed performance standards; and
 - b. Analysis of vulnerability and additional resource requirement should a failure occur.
5. Corrective Action:
 - a. Description of corrective action to be implemented in the event that Cleanup or Performance Standards set forth in the ROD are exceeded; and
 - b. Schedule for implementing these corrective actions.
6. Safety plan:
 - a. Description of precautions, of necessary equipment, etc., for Site personnel; and
 - b. Safety tasks required in event of systems failure.
7. Description of equipment:
 - a. Equipment identification;
 - b. Installation of monitoring components;

- c. Maintenance of Site equipment; and
 - d. Replacement schedule for equipment and installed components.
8. Records and reporting mechanisms required:
- a. Daily operating logs;
 - b. Laboratory records;
 - c. Records for operating costs;
 - d. Mechanism for reporting emergencies;
 - e. Personnel and maintenance records; and
 - f. Quarterly/annual reports to State agencies.

Task 6: Performance Monitoring

Performance monitoring shall be conducted to ensure that all Performance Standards are met.

A. Performance Standard Verification Plan

The purpose of the Performance Standard Verification Plan is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the Remedial Action are met. The Draft Performance Standards Verification Plan shall be submitted with the Pre-Final Design. Once approved, the Performance Standards Verification Plan shall be implemented on the approved schedule. The Performance Standards Verification Plan shall include:

- 1. Quality Assurance Project Plan;
- 2. Health and Safety Plan; and
- 3. Field Sampling Plan.

IV. CONTENT OF SUPPORTING PLANS

The documents listed in this Section IV of the SOW -- the Quality Assurance Project Plan, the Field Sampling Plan, the Health and Safety Plan, the Contingency Plan and the Construction Quality Assurance Plan -- are documents that shall be prepared and submitted as set forth in Section III of this SOW. This Section IV provides the required contents of each of these supporting plans.

A. Quality Assurance Project Plan

The Settling Defendant shall develop and implement a Site-specific Quality Assurance Project Plan (QAPP), covering sample analysis and data handling for samples collected in all phases of future Site work, based upon the Consent Decree and guidance provided by EPA. The QAPP shall be consistent with the requirements of the EPA Contract Lab Program (CLP) for laboratories proposed outside the CLP. The QAPP shall at a minimum include:

Project Description

- * Facility Location/History
- * Past Data Collection Activity
- * Project Scope
- * Sample Network Design
- * Parameters to be Tested and Frequency of Testing
- * Project Schedule

Project Organization and Responsibility

Quality Assurance Objective for Measurement Data

- * Level of Quality Control/Effort
- * Accuracy, Precision and Sensitivity of Analysis
- * Completeness, Representativeness and Comparability

Sampling Procedures

Sample Custody

- * Field Specific Custody Procedures
- * Laboratory Chain of Custody Procedures

Calibration Procedures and Frequency

- * Field Instruments/Equipment
- * Laboratory Instruments

Analytical Procedures

- * Non-Contract Laboratory Program
- Analytical Methods
- * Field Screening and Analytical Protocol
- * Laboratory Procedures

Internal Quality Control Checks

- * Field Measurements
- * Laboratory Analysis

Data Reduction, Validation, and Reporting

- * Data Reduction
- * Data Validation
- * Data Reporting

Performance and System Audits

- * Internal Audits of Field Activity
- * Internal Laboratory Audit
- * External Field Audit
- * External Laboratory Audit

Preventive Maintenance

- * Routine Preventative Maintenance Procedures and Schedules
- * Field Instruments/Equipment
- * Laboratory Instruments

Specific Routine Procedures to Assess Data Precision, Accuracy and Completeness

- * Field Measurement Data
- * Laboratory Data

Corrective Action

- * Sample Collection/Field Measurement
- * Laboratory Analysis

Quality Assurance Reports to Management

The Settling Defendant shall attend a pre-QAPP meeting with EPA. The Settling Defendant shall submit a draft QAPP to EPA for review and approval and shall implement the QAPP as approved.

B. Health and Safety Plan

The Settling Defendant shall develop and implement a Health and Safety Plan which is designed to protect on-Site personnel and area residents from physical, chemical and all other hazards posed by this Remedial Action. The Health and Safety Plan shall set forth the performance levels and criteria necessary to address the following areas:

- Facility Description
- Personnel
- Levels of protection
- Safe work practices and safeguards
- Medical surveillance
- Personal and environmental air monitoring
- Personal protective equipment
- Personal hygiene
- Decontamination - personal and equipment
- Site work zones
- Contaminant control
- Contingency and emergency planning
- Logs, reports and record keeping

The Health and Safety Plan shall be prepared in accord with EPA guidance and all OSHA requirements set forth at 29 C.F.R. 1910 and 1926.

C. Contingency Plan

Settling Defendant shall develop and submit a Contingency Plan describing procedures to be used in the event of an accident or emergency at the Site. The draft Contingency Plan shall be submitted with the prefinal design and the draft final Contingency Plan shall be submitted with the final design. The final Contingency Plan shall be submitted prior to the start of construction, in accordance with the approved construction schedule. Settling Defendant shall implement the approved Contingency Plan. The Contingency Plan shall include, at a minimum, the following:

1. Name of the person or entity responsible for responding in the event of an emergency incident.
2. Plan and date(s) for meeting(s) with the local community, including local, State and Federal agencies involved in the cleanup, as well as local emergency squads and hospitals.
3. First aid medical information.
4. Air Monitoring Plan.
5. Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), as specified in 40 C.F.R. Part 109, describing measures to prevent and contingency plans for potential spills and discharges from materials handling and transportation.

D. Field Sampling Plan

The Settling Defendant shall develop and implement a field sampling plan (in accord with "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," October 1988). The Field Sampling Plan shall supplement the QAPP and address all sample collection activities.

E. Construction Quality Assurance Plan

Settling Defendant shall develop and implement a Construction Quality Assurance Plan (CQAP) which describes the Site-specific components of the quality assurance program which shall ensure that the Remedial Action performed pursuant to the Consent Decree and this SOW meets or exceeds all design criteria, plans, and specifications. The draft CQAP shall be submitted with the prefinal design and the draft final CQAP shall be submitted with the final design. The final CQAP shall be submitted prior to the start of construction in accordance with the approved construction schedule. The CQAP shall contain, at a minimum, the following elements:

1. Responsibilities and authorities of all organizations and key personnel involved in the design and construction of the Remedial Action.

2. Qualifications of the Quality Assurance Official to demonstrate he possesses the training and experience necessary to fulfill his identified responsibilities.
3. Protocols for sampling and testing used to monitor construction.
4. Identification of proposed quality assurance sampling activities including the sample size, locations, frequency of testing; acceptance and rejection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Consent Decree shall be included.
5. Reporting requirements for CQA activities shall be described in detail in the CQA plan. This shall include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. Provisions for the final storage of all records shall be presented in the CQA plan.

Settling Defendant shall implement the CQA as approved by EPA.

V. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE

A summary of the project schedule and reporting requirements contained in this SOW are set forth below:

<u>Submission</u>	<u>Due Date</u>
1. RD Work Plan	90 days after Notice of Authorization to proceed with RD.
2. Preliminary Design (30%)	135 days after EPA's approval of Final RD Work Plan.
3. Prefinal Design (95%)	120 days after receipt of EPA's comments on the Preliminary Design.
4. Final Design (100%)	90 days after receipt of EPA's comments on the Prefinal Design.
5. RA Work Plan	30 days after receipt of EPA's Notice of Authorization to Proceed with RA.
6. Award RA Contract(s)	As approved in prefinal design.
7. Pre-Construction Inspection	As approved in prefinal design.

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| 8. | Initiate Construction of RA | As approved in prefinal design. |
| 9. | Completion of Construction | As approved in prefinal design. |
| 10. | Prefinal Inspection | As approved in prefinal design. |
| 11. | Prefinal Inspection Report | As approved in prefinal design. |
| 12. | Final Inspection | As approved in prefinal design. |
| 13. | Final O&M Plan | To be proposed during prefinal design for EPA approval. |
| 14. | Construction Completion Report | To be proposed during prefinal design for EPA approval. |
| 15. | Completion of Remedial Action Report | To be proposed during prefinal design for EPA approval. |
| 16. | Completion of Work Report | To be proposed during prefinal design for EPA approval. |